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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/927,683	08/09/2001	W. Thomas Novak	NRCA004	6484
26541	7490	10/16/2003		
RITTER, LANG & KAPLAN 12930 SARATOGA AVE. SUITE D1 SARATOGA, CA 95070				
EXAMINER ESPIN, DAVID B				
ART UNIT 2851		PAPER NUMBER		

DATE MAILED: 10/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/927,683

Applicant(s)

NOVAK, W. THOMAS

Examiner

D. Ben Esplin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) 16,17,29,30,46,47,57 and 58 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-15,18-28 and 48-56 is/are allowed.
- 6) ☒ Claim(s) 31,35-38 and 42-44 is/are rejected.
- 7) ☒ Claim(s) 32-34 and 39-41 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restrictions

Claims 16, 17, 29, 30, 46, 47, 57, and 58 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected device or wafer, there being no allowable generic or linking claim. Election was made **without** traverse in the response filed 9/12/03.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(c) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 31, 35-38, and 42-44 are rejected under 35 U.S.C. 102(c) as being anticipated by U.S. Patent No. 6,421,112 to Bisschops.

FIGS. 2A and 2B show of Bisschops show a scanning stage apparatus including a system chamber (vacuum chamber 11), a table (stage 14), a rod (tube 31), a first plate (slider 32), a second plate (slider 32), a first actuator (linear motor 34), and a second actuator (Y1 and Y2 drives). The rod is described as a tube, which is a hollow shaped rod, and passes through first and second sleeves (air bearings 21), which may include a bellows or diaphragm (col. 9 lines 9-12). Further the first and second actuators are arranged outside of the system chamber.

Allowable Subject Matter

Claims 1-15, 18-28, and 48-56 are allowed.

Claims 32-34 and 39-41 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance:

Claims 1-15 are deemed to be allowable because the structure of a second drive mechanism including a second rod is not shown or suggested in the prior art in conjunction with the rest of the structural limitations recited in these claims. Although Bisschops, as applied above reads on the other elements of independent claim 1, the inclusion of this feature is viewed as a non-obvious addition.

Claims 18-27 and 32-34 are viewed as containing novel subject matter because Bisschops, which is considered to be the prior art reference closest in structural features, does not teach of a third actuator arrangement for moving the entire rod in along a third axis.

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Claims 39-41 and 48-56 include a dummy chamber disposed at the end of the rod opposite the table, for securing the second plate. The prior is silent regarding the use of such a chamber for the purpose of supporting any part of the scanning stage device as defined by these claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 6,445,440 to Bisschops et al. discloses a scanning stage apparatus that includes a driving mechanism located outside of a system chamber.

U.S. Patent No. 5,820,104 to Koyano et al. discloses a substrate handling apparatus including a rod and a first and second plate.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. Ben Esplin whose telephone number is (703) 305-4022. The examiner can normally be reached on Mon.-Fri. (8am-4:30 pm).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russell E. Adams can be reached on (703) 308-2847. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

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DBE

A handwritten signature in black ink, appearing to read "Russell E. Adams". The signature is written in a cursive, flowing style. Below the signature, there is a faint, rectangular stamp that is mostly illegible but appears to contain some text and possibly a date.